

CLAIMS

1. A method of determining clearance between a stem (3) of a valve (1) in an engine (2) and a moving member (8) of an electromagnetic actuator (7) comprising
5 electromagnetic displacement means (14, 15) for moving the moving member between an extreme open position and an extreme closed position of the valve, the electromagnetic displacement means being controlled by servo-control means on the basis of a reference electrical
10 characteristic, the method being characterized in that it comprises the steps of:
- controlling the electromagnetic means to obtain a displacement speed that is substantially constant for the moving member between the extreme closed position and the
15 extreme open position;
 - obtaining values of the reference electrical characteristic for intermediate positions of the moving member; and
 - detecting an intermediate position at which the
20 reference electrical characteristic is subject to a sudden change.
2. A method according to claim 1, characterized in that detection includes a stage of computing a derivative of
25 the reference electrical characteristic relative to the position of the moving member (8).
3. A method according to claim 1 or claim 2, characterized in that the reference electrical
30 characteristic is a current.
4. A method according to any one of claims 1 to 3, characterized in that the displacement speed of the moving member is maintained substantially constant over a
35 fraction of its displacement corresponding to a maximum clearance.